

Amendments to the Specification:

Please add the following new paragraph after the title and before the paragraph starting on page 1, line 5:

THIS APPLICATION IS A U.S. NATIONAL PHASE APPLICATION OF PCT INTERNATIONAL APPLICATION PCT/JP2003/011864.

Please replace the paragraph, beginning at page 1, line 7, with the following rewritten paragraph:

The present invention relates to a body motion evaluation apparatus and a body motion evaluation system and method capable of being used in rehabilitation or the like.

Please replace the paragraph, beginning at page 1, line 12, with the following rewritten paragraph:

There exist a large number of persons who have undergone operations for osteopathy and the like, and need rehabilitation, ~~and it is understood said that~~ the speed of recovery from such a disease depends on self-active training by a patient.

Please replace the paragraph, beginning at page 1, line 16, with the following rewritten paragraph:

Furthermore, in recent years with the advent of an aging society, for example, it has been increasingly required that the health of aged persons living alone be capable of being checked by doctors or relatives in remote areas ~~with the advent of an aging society~~. Furthermore, ~~aside from this,~~ it has been increasingly required that management of the physical condition of an aged inpatient in a hospital be conducted more minutely.

Please replace the paragraph, beginning at page 2, line 3, with the following rewritten paragraph:

Furthermore, ~~aside from the cause described above,~~ causes of equilibration disorders such as dizziness may also include ear diseases such as vestibular neuronitis, cerebrovascular diseases such as cerebral infraction, cerebral hemorrhage and chronic cerebral vascular insufficiency, and blood pressure abnormalities such as hypertension, hypotension and orthostatic hypotension.

Please replace the paragraph, beginning at page 2, line 10, with the following rewritten paragraph:

Early detection of such abnormalities is important in ensuring safety ~~on health~~ of normal healthy people.

Please replace the paragraph, beginning at page 2, line 12, with the following rewritten paragraph:

~~As The following are~~ conventional methods of objectively determining recovery situations of patients by rehabilitation, the physical condition of aged persons and the health of normal healthy people described above, ~~and the like, the following methods are known. In one conventional~~ That is, a method, in which a target (e.g. color marker) is attached to a predetermined site of a subject, and the target is photographed by a television camera to analyze motions of the subject, ~~or the like, is known~~ (e.g. see Japanese Patent Laid-Open No. 06-50983, hereinafter referred to as Patent Document 1).

Please replace the paragraph, beginning at page 2, line 22, with the following rewritten paragraph:

~~Furthermore, the~~ The entire disclosure of Patent Document 1 are incorporated herein by reference in its entirety.

Please replace the paragraph, beginning at page 2, line 24, with the following rewritten paragraph:

However, as described above, the time period over which data for analysis of motions for managing the physical conditions of patients after rehabilitation and patients just recovered from illnesses, or controlling an abnormal state of normal healthy people such as giddiness on standing up is limited to the time period over which a manager can take part in analysis of motions of a subject, ~~thus~~ Thus making it is impossible to check the situation of the subject all the time.

Please replace the paragraph, beginning at page 3, line 7, with the following rewritten paragraph:

Furthermore, in this case, work for obtaining and processing data of motions of the subject is left to the personal point of view or personal judgment of the manager, and the work requires enormous efforts. Thus, it is generally difficult to evaluate the data obtained in this way as an objective measure.

Please replace the paragraph, beginning at page 3, line 13, with the following rewritten paragraph:

~~Furthermore, in~~ In the method in which the motions of the subject are analyzed with a television camera as described in Patent Document 1, the situation can be known only within the range of installation of the television camera. Thus, a method enabling the situation to be evaluated all the time and in an objective manner has been required.

Please replace the paragraph, beginning at page 4, line 4, with the following rewritten paragraph:

~~That is, evaluation~~ Evaluation of some data may be skipped inadvertently. Furthermore, since work for extracting data to be evaluated is conducted according to the personal judgment

of the manager, it cannot be assured that a range of clipped data always meets certain conditions from an objective point of view. Thus, for example, there arises a problem such that only evaluation results of low accuracy can be obtained, because the evaluation results include not only data to be evaluated, but also data not to be evaluated indistinguishably, including data of other behavior, which should not be essentially included in evaluation, can be obtained.

Please replace the paragraph, beginning at page 4, line 15, with the following rewritten paragraph:

In view of the problems of conventional techniques described above, the invention of this application has as its object the provision of a body motion evaluation apparatus, a body motion evaluation system and method the like capable of evaluating a recovery situation of a motion function and the like of subjects more easily and accurately compared with the conventional techniques.

Please replace the paragraph, beginning at page 4, line 22, with the following rewritten paragraph:

The first ~~invention aspect~~ is a body motion evaluation apparatus capable of being attached to a human body, comprising:

Please replace the paragraph, beginning at page 5, line 16, with the following rewritten paragraph:

The second ~~invention aspect~~ is a body motion evaluation apparatus capable of being attached to a human body, comprising:

Please replace the paragraph, beginning at page 6, line 15, with the following rewritten paragraph:

The third ~~invention aspect~~ is the body motion evaluation apparatus according to the first ~~invention aspect~~, comprising controlling means of controlling said acceleration detecting means, wherein said controlling means turns on the power of said acceleration detecting means at a time when said first behavior detection signal is detected by said signal receiving means, and turns off the power of said acceleration detecting means after predetermined time elapses.

Please replace the paragraph, beginning at page 6, line 23, with the following rewritten paragraph:

The fourth ~~invention aspect~~ is the body motion evaluation apparatus of the second ~~invention aspect~~, comprising controlling means of controlling the acceleration detecting means,

Please replace the paragraph, beginning at page 7, line 7, with the following rewritten paragraph:

The fifth ~~invention aspect~~ is a body motion evaluation system comprising:

the body motion evaluation apparatus according to the first or the third aspects; and

first behavior detecting means of detecting a start or end of said first predetermined behavior of a human body, and outputting said first behavior detection signal;~~and,~~

~~the body motion evaluation apparatus according to the first or the second inventions.~~

Please replace the paragraph, beginning at page 7, line 14, with the following rewritten paragraph:

The sixth ~~invention~~-aspect is a body motion evaluation system comprising:

first behavior detecting means of detecting a start or end of the first predetermined behavior of a human body and outputting the first behavior detection signal;

second behavior detecting means of detecting a start or end of the second predetermined behavior of a human body and outputting the second behavior detection signal;
and

the body motion evaluation apparatus of the second or fourth ~~invention~~-aspect.

Please replace the paragraph, beginning at page 7, line 24, with the following rewritten paragraph:

The seventh ~~invention~~-aspect is the body motion evaluation system according to the sixth ~~invention~~-aspect, wherein said first behavior detecting means is infrared light projecting means or electric field generating means, and

Please replace the paragraph, beginning at page 8, line 6, with the following rewritten paragraph:

The eighth ~~invention~~-aspect is the body motion evaluation system of the sixth ~~invention~~-aspect, wherein at least one of the first behavior detecting means and the second behavior detecting means is infrared light projecting means or electric field generating means,
and

Please replace the paragraph, beginning at page 8, line 14, with the following rewritten paragraph:

The ninth ~~invention~~-aspect is the body motion evaluation system according to the seventh ~~invention~~-aspect, wherein said first behavior detecting means comprises

Please replace the paragraph, beginning at page 9, line 1, with the following rewritten paragraph:

The tenth ~~invention~~-aspect is the body motion evaluation system of the sixth ~~invention~~-aspect, wherein the first behavior detecting means or the second behavior detecting means comprises:

Please replace the paragraph, beginning at page 9, line 11, with the following rewritten paragraph:

The eleventh ~~invention~~-aspect is the body motion evaluation system of the ninth or tenth ~~invention~~aspect, wherein the passage detecting means is a floor reaction force sensor within a predetermined detection range or a distance sensor detecting a shield.

Please replace the paragraph, beginning at page 9, line 16, with the following rewritten paragraph:

The twelfth ~~invention~~-aspect is the body motion evaluation system according to the eighth ~~invention~~aspect, wherein said load detecting means is departure/seating detecting means of detecting a departure state in which an object departs from a toilet seat, or detecting a seating state in which said object is seated on said toilet seat.

Please replace the paragraph, beginning at page 9, line 22, with the following rewritten paragraph:

The thirteenth ~~invention~~-aspect is the body motion evaluation system according to the ninth ~~invention~~aspect, wherein said departure/seating detecting means comprises

Please replace the paragraph, beginning at page 10, line 6, with the following rewritten paragraph:

The fourteenth ~~invention~~-aspect is the body motion evaluation system according to the tenth ~~invention~~aspect, wherein said departure/seating state determining means

Please replace the paragraph, beginning at page 10, line 17, with the following rewritten paragraph:

The fifteenth ~~invention~~-aspect is the body motion evaluation system according to the eleventh ~~invention~~aspect, wherein said departure/seating state determining means determines that said object is in a seating state at a time when it is detected that the load detected by said load sensor is equal to or greater than the first predetermined value.

Please replace the paragraph, beginning at page 10, line 23, with the following rewritten paragraph:

The sixteenth ~~invention~~-aspect is the body motion evaluation apparatus according to the second ~~invention~~aspect, wherein said acceleration detecting means detects

Please replace the paragraph, beginning at page 11, line 8, with the following rewritten paragraph:

The seventeenth ~~invention~~-aspect is the body motion evaluation apparatus according to the third ~~invention~~aspect, wherein said acceleration detecting means detects an acceleration direction of gravity based on said first acceleration and said second acceleration detected.

Please replace the paragraph, beginning at page 11, line 13, with the following rewritten paragraph:

The eighteenth ~~invention~~-aspect is the body motion evaluation apparatus according to the fourth ~~invention~~aspect, wherein said calculating means calculates the result of integration of a variation in a signal obtained by said acceleration detecting means, or a period of variation in said signal.

Please replace the paragraph, beginning at page 11, line 18, with the following rewritten paragraph:

The nineteenth ~~invention~~-aspect is the body motion evaluation system of the fifth or sixth ~~invention~~aspect, wherein the body motion evaluation apparatus further comprises:

Please replace the paragraph, beginning at page 12, line 3, with the following rewritten paragraph:

The twentieth ~~invention~~-aspect is the body motion evaluation system of the nineteenth ~~invention~~aspect, wherein the body motion evaluation apparatus further comprises internal sending means of sending the results of calculation by the calculating means or the stored results stored in the storing means, and

Please replace the paragraph, beginning at page 12, line 13, with the following rewritten paragraph:

The twenty-first ~~invention~~-aspect is the body motion evaluation system of the twentieth ~~invention~~aspect, wherein the internal sending means sends contents to be sent when a stored result is newly added in the storing means, or when the calculation is performed by the calculating means.

Please replace the paragraph, beginning at page 12, line 18, with the following rewritten paragraph:

The twenty-second ~~invention~~-aspect is the body motion evaluation system of the nineteenth ~~invention~~aspect, further comprising second storing means of storing received results received by the external receiving means.

Please replace the paragraph, beginning at page 12, line 22, with the following rewritten paragraph:

The twenty-third ~~invention~~-aspect is the body motion evaluation system of the twenty-second ~~invention~~aspect, further comprising inputting means of selecting any of the stored results stored in the second storing means, and making the second displaying means display the selected result.

Please replace the paragraph, beginning at page 13, line 3, with the following rewritten paragraph:

The twenty-fourth ~~invention~~aspect is a program of making a computer function as the calculating means and the calculation controlling means of the body motion evaluation apparatus of the first or second ~~invention~~aspect.

Please replace the paragraph, beginning at page 13, line 7, with the following rewritten paragraph:

The twenty-fifth ~~invention~~aspect is a recording medium carrying the program of the twenty-fourth ~~invention~~aspect, which can be processed by a computer.

Please replace the paragraph, beginning at page 17, line 20, with the following rewritten paragraph:

Embodiments of the present invention will be described below, with respect to ~~using~~ Figures 1 to 16.

Please replace the paragraph, beginning at page 21, line 8, with the following rewritten paragraph:

Therefore, in order that motion evaluations of walk training using parallel bars (~~hereinafter, referred to as unit walk training~~) can be conducted highly objectively, accurately and continuously, a configuration enabling automatic extraction of only data for a time period over which the subject walks has very important implications.

Please replace the paragraph, beginning at page 25, line 22, with the following rewritten paragraph:

In this case, however, as described above, for avoiding erroneous detection by the apparatus 11 of a wearer other than the wearer of the body motion evaluation apparatus 11 actually involved in a ~~toilet room entrance behavior~~movement along the corridor, an apparatus of which the range of wireless communication is about several tens centimeters so that only moderate range transmission can be performed is preferably used.

Please replace the paragraph, beginning at page 30, line 20, with the following rewritten paragraph:

Furthermore, an example of display by the ~~marking~~marking-displaying means 15 will be further described with reference to Figures 13 and 14 described later.

Please replace the paragraph, beginning at page 36, line 12, with the following rewritten paragraph:

The load applied to the load sensor 221 is signal-processed by the signal processing means 222, and ~~outputs~~is outputted a signal corresponding to the load applied to the load sensor 221 from the signal processing means 222 as a sequential signal. The bed departure detecting means 211 detects a start of a bed departure state based on the signal outputted from the signal processing means 222.